

What Is Claimed Is:

1. A simulated steering feel system comprising:

a servo disk motor, said servo disk motor capable of imparting feedback torque to an input device.

2. A simulated steering feel system as described in claim 1 further comprising a steering feel control processor.

3. A simulated steering feel system as described in claim 1 further comprising at least one vehicle dynamic sensor.

4. A simulated steering feel system as described in claim 1 further comprising:

a torque multiplier, said torque multiplier utilized to magnify torque generated by said servo disk motor.

5. A simulated steering feel system as described in claim 4 wherein said torque multiplier is a gear reducer.

6. A simulated steering feel system as described in claim 1 wherein said input device is a steering wheel.

7. A simulated steering feel system as described in claim 1 further comprising a steering wheel sensor element.

8. A simulated steering feel system as described in claim 1 for use in a driving simulator.

9. A simulated steering feel system as described in claim 1 for use in an entertainment device.

10. A simulated steering feel system as
5 described in claim 1 for use in an automobile in
conjunction with a steer by wire system.

11. A simulated steering feel system as described in claim 1 further comprising:

a motor driver element, said motor driver
10 element utilized to operate said servo disk motor.

12. A simulated steering feel system comprising:

a servo disk motor; and

15 a torque multiplier, said torque multiplier
used in conjunction with said servo disk motor to
impart road feel to a steering wheel.

13. A simulated steering feel system as described in claim 12 wherein said torque multiplier is a gear reducer.

20 14. A simulated steering feel system as
described in claim 12 further comprising:

a steering feel control processor.

15. A simulated steering feel system as described in claim 12 further comprising:

25 at least one vehicle dynamic sensor.

16. A simulated steering feel system ~~as~~
described in claim 12 further comprising a steering
wheel sensor element.

17. A simulated steering feel system as
30 described in claim 12 further comprising:

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a motor driver element, said motor driver element utilized to operate said servo disk motor.

18. A simulated steering feel system as described in claim 12 for use in a driving simulator.

5 19. A simulated steering feel system as
described in claim 12 for use in an entertainment
device.

20. A simulated steering feel system as described in claim 12 for use in an automobile in conjunction with a steer by wire system.

21. A method of creating simulated steering feel comprising:

determining an appropriate feedback torque;
and

15 transmitting said feedback torque towards the
steering wheel using a servo disk motor.

22. A method of creating simulated steering
feel as described in claim 21 wherein determining
appropriate feedback torque comprises the steps of
measuring vehicle dynamics characteristics; and

imputing an appropriate feedback torque using said vehicle dynamic characteristics.

23. A method of simulating steering feel as described in claim 21 further comprising the step of
25 increasing the output of said servo disk motor using a gear reducer.